REMARKS

Claims 1-24 will be pending upon entry of the present amendment. Claim 8 is amended. No new matter is being presented.

Claim 8 is amended to confirm that the inverting input is part of the subtractor node element, as was already clear from the remainder of the claim. The scope of the claim is not changed with this amendment.

Rejections Under 35 U.S.C. §§ 102 and 103

Claims 1, 4, 9-11, 13-14, 17-18 and 21-22 are rejected under 35 U.S.C. § 102(b) as being anticipated by Blank et al. (US 6,274,948, hereafter, *Blank*); claims 2, 3, 5, and 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Blank; claims 6-7 and 16 are rejected as being unpatentable over Blank in view of Oguchi (US 2002/0033047); and claim 8 is rejected as being unpatentable over Blank in view of Oguchi in further view of Ishiyama (US 6,738,214).

In the remarks and arguments that follow, when citing to specific text from Blank, column numbers and line numbers will be separated by a colon; for example, 4:22, to indicate page 4, line 22 of Blank.

The standard that must be met to reject a claim under § 102 is outlined in the MPEP at § 2131:

> A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.... The identical invention must be shown in as complete detail as is contained in the ... claim.

(Citations omitted.)

Blank fails to anticipate a "... device having a plurality of preferential detection axes, comprising: inertial sensor means, which are sensitive to accelerations parallel to said preferential detection axes; ... first comparison means ... supplying a pre-determined logic value when at least one of said acceleration signals is greater than a respective upper threshold; and **second comparison means ... for supplying said pre-determined logic value when each of said acceleration signals is greater than a respective lower threshold...**," as recited in claim 1.

In rejecting claim 1, the Office Action points to blank's sensors 32 and 33 as corresponding to the sensor means of claim 1. Accordingly, in order to anticipate claim 1, Blank must teach second comparison means for supplying a predetermined logic value when signals from each of sensors 32 and 33 is greater than a respective lower threshold. Blank provides no such teaching.

The applicants strongly disagree with the Examiner's statement (p. 2, lines 3-5 of Office Action) that "Blank discloses that the acceleration sensors (32, 33) are compared to three threshold levels (LEV1-3; column 6, lines 23-38 to determine the intensity of the event." That statement simply is not true. The paragraph at col. 6, lines 23-38 of Blank never mentions anything about acceleration sensor 33. Instead, the paragraph explicitly states that "a central impact **signal for speed reduction** of the passenger cell is derived from the acceleration signal of the **central acceleration sensor 32** ... (and) is compared with different threshold values ..." (6:26-31). One skilled in the art would recognize that any measuring by the transverse sensor 33 would be completely immaterial to measuring a speed reduction of the vehicle because the transverse sensor could only measure lateral movements while the speed of the vehicle is by definition only a longitudinal measurement. Thus, the applicants respectfully submit that it is wrong to rely on the paragraph at col. 6, lines 23-38 for any teaching regarding the acceleration sensor 33.

In responding to applicants' previous arguments, the Examiner acknowledges that there is no discussion of the operation of the transverse sensor 33, but argues that "it is inherent that all of the Blank sensors would operate in the same manner to supply consistent signals to the evaluator (34) in order to correctly activate the vehicle airbags." Applicants respectfully traverse this position, as outlined below.

The MPEP discusses the Examiner's burden with regard to a showing of inherency, as outlined in relevant part below.

> The fact that a certain result or characteristic <u>may</u> occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic.... To establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact

that a certain thing may result from a given set of circumstances is not sufficient....

In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic <u>necessarily</u> flows from the teachings of the applied prior art. (MPEP § 2112 at IV; citations omitted, emphasis in the original.)

Blank teaches a number of sensors, including the impact sensor 1 (sensitive to longitudinal acceleration), the longitudinal sensor 32, the transverse sensor 33, and child seat/occupant sensors (see 5:40-42). To the extent that Blank describes the operation of each of these sensors, it is clear that each is operated *differently* from the others, not the same, as suggested by the Examiner. For example, the signal from the impact sensor 1 is derived from an impact over time, i.e., a combination of strength and duration of speed reduction (see Figure 4, 5:66-6:4), while the signal from the centrally positioned sensor 32 is derived from acceleration only (6:26-29). Signals from the seat occupant sensors is derived from weight, or other indications of occupancy, not acceleration (5:39-42). Thus, there is no characteristic that is necessarily present, as required by the MPEP guidelines for inherency.

Second, Blank's method employs its impact sensor 1 as an early detection device to detect a collision before it affects the speed of the central portion of the vehicle (2:63, 64). By evaluating the differences in the rates and/or amplitudes of speed reduction of the impact sensor 1 and the longitudinal sensor 32, *along a common axis* (4:45-50, Figure 1), the central evaluator 34 determines an appropriate triggering response of the vehicle airbags (2:66-3:5, 6:53-65). There is no hint that a beneficial effect may be achieved by combining longitudinal and lateral acceleration signals, and, of course, there is no teaching as to how such a combination might be made. Thus, there is nothing in Blank's disclosure that supports a determination that the transverse sensor 33 inherently operates in the same manner as either the longitudinal sensor 32, or the impact sensor 1.

Furthermore, the inherency of operation would need to extend, apart from the sensors, to the operation of the central evaluator 34. As explained above, Blank's central evaluator evaluates signals from each of two sensors (1, 32) that are positioned some distance from each other and arranged to detect changes of acceleration along the same longitudinal axis. Because Blank has not provided a remote sensor configured to sense acceleration in the

transverse axis there can be no inherent teaching that the central evaluator would evaluate a signal from the transverse sensor 33 in the same way it evaluates signals from the longitudinal sensors 1, 32. Quite the contrary, it is inherent that signals from the sensors 32 and 33 will be evaluated differently. Because there is no remote impact sensor arranged to sense a transverse impact, in the same way that the impact sensor 1 senses longitudinal impacts, for evaluation in relation to data from the transverse sensor 33, Blank's inventive method cannot be applied to transverse impacts. One of ordinary skill in the art would recognize that data from the transverse sensor 33 is to be evaluated in a conventional manner to trigger airbags in response to side impacts, without reference to input from other sensors.

Also, even if it were inherent that all of Blank's sensors operated in the same manner, and that Blank's central evaluator evaluated the signals from sensors 32 and 33 identically, Blank would still fail to anticipate claim 1. Blank is directed to a system and method configured to differentiate between collision events that do not require deployment of airbags and those that do, and to determine the extent of deployment necessary. For this purpose, it evaluates data from different positions of a vehicle related to a *same* vector of acceleration. Blank provides no discussion or teaching that a pre-determined logic value is supplied when each of a plurality of acceleration signals, each correlated to an acceleration parallel to a respective one of a *plurality* of axes, is greater than a respective threshold.

For the reasons outlined, Blank fails to anticipate claim 1, which is therefore allowable.

Claims 4 and 9 depend on claim 1, and thus, are also not anticipated by Blank.

Although the language of claims 10, 13, and 21 is not identical to that of claims 1, the allowability of claims 10, 13, and 21 will be apparent in view of the above discussion.

With regard to the rejections of claims 2, 3, 5-8, 12, and 16 under 35 U.S.C. § 103, it has been demonstrated that Blank cannot anticipate the respective base claims, nor has the Examiner argued that any of claims 1, 10, or 13 would be obvious in view of Blank. Accordingly, these rejections are moot, and will not be discussed in the present response.

Overall, the cited references do not singly, or in any motivated combination, teach or suggest the claimed features of the embodiments recited in independent claims 1, 9, 10, 13, or 21, and thus such claims are allowable. Applicant's decision not to argue the allowability of

each of the dependent claims is not to be construed as an admission that such claims would not be allowable but for their dependence on allowable base claims, and applicant reserve the right to present such arguments as may become necessary in the future.

Applicants have made a good faith effort to advance the case, and have not altered the scope of the claims as previously presented. Accordingly, applicants respectfully request that the Examiner enter and reconsider this application and timely allow all pending claims. The Examiner is encouraged to contact the Hal Bennett by telephone at (206) 622-4900 to discuss the above and any other distinctions between the claims and the applied references, and any informalities in the claims that may yet remain, to expeditiously place the claims in condition for allowance.

The Director is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090.

Respectfully submitted,

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